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- **4.** An apparatus of claim **2** wherein said second beam deflector is a two-dimensional gimbal coupled to an optical element having a predetermined optical characteristic.
- 5. An apparatus of claim 1 wherein said sensor is an infrared sensing camera.
- 6. An apparatus of claim 1 wherein said first image and said second image are superimposed.
- 7. An apparatus for displaying a projection image comprising:
  - means for projecting a first portion of the projection 10 image;
  - means for projecting a second portion of the projection image;
  - means for sensing an alignment characteristic of said first portion with respect to said second portion and generating a beam deflector drive signal in response thereto; and
  - means for continuously manipulating an alignment of said first portion in response to said beam deflector drive 20 signal.
- 8. An apparatus of claim 7 wherein said means for manipulating is responsive to an aircraft inertial reference signal representative of an operational characteristic of an aircraft.
- 9. An apparatus of claim 7 wherein said means for manipulating is an electro-mechanically driven two-dimensional gimballed optical element.
- 10. An apparatus of claim 9 wherein said optical element is a flat glass plate having a first index of refraction and a 30 comprising: first thickness dimension.
- 11. An apparatus of claim 10 further including a second flat glass plate.
- 12. An apparatus of claim 11 wherein said second fat glass plate is stationary and has a second thickness dimension 35 similar to said first thickness dimension, and a second index of refraction which is similar to said first index of refraction.
- 13. An apparatus of claim 10 wherein said second flat glass plate is an electro-mechanically driven two-dimensional gimballed optical element.
- 14. An apparatus of claim 13 wherein said means for manipulating is responsive to an aircraft inertial reference signal representative of an operational characteristic of an aircraft.
- 15. An apparatus of claim 7 wherein said first portion of  $_{45}$  aircraft. the projection image and said second portion of the projection image are superimposed.

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16. A method of aligning a first projected image with a second projected image in an image array comprising the steps of:

sensing an alignment characteristic of said first projected image with respect to said second projected image and generating an image beam deflector drive signal in response thereto;

interposing an optical element between a projector, which projects said first projected image and a viewing surface upon which said first project image is incident;

- continuously manipulating said optical element in response to said image beam deflector drive signal to effect a change in relative position of said first projected image with respect to said second projected image.
- 17. A method of claim 16 further comprising the step of manipulating said optical element in response to a signal representative of an operational characteristic of an aircraft.
- 18. A method of claim 16 wherein said step of manipulating an optical element includes rotating an optical element around a vertical axis.
- 19. A method of claim 18 wherein said step of manipulating an optical element further includes rotating said optical element around a horizontal axis.
- 20. A method of claim 16 wherein said step of sensing an alignment characteristic includes transmission and detection of non-visible fiducial marks for aiding in alignment of said first projected image with said second projected image.
- 21. An avionics display for displaying a projected image comprising:
  - a projector disposed on an aircraft, said projector for emitting a projection beam;
  - a viewing screen;
- a beam deflector for changing a direction of said projection beam;
  - sensor for monitoring the alignment characteristic of said projection beam;
  - means for real time manipulating of said beam deflector as a function of said alignment characteristic.
- 22. A display of claim 21 wherein said variable characteristic is a signal output from an alignment sensor.
- 23. A display of claim 21 wherein said variable characteristic is a function of an operational characteristic of said aircraft.

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